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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
LE, BRIAN Q	

ART UNIT	PAPER NUMBER
2623	

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/637,456	HOOK, TIMOTHY J. VAN	
	Examiner	Art Unit	
	Brian Q. Le	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) *12* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11 and 13-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04/08/2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment and Arguments

1. Applicant's amendment filed April 08, 2005, has been entered and made of record.

2. Applicant's arguments with regard to the rejection of claims 1 and 5 under 35 U.S.C. 112, 1st paragraph. The Applicant argues have been fully considered, but are not considered persuasive because of the following reasons:

For claim 1, as indicated in previous Office Action, the Applicant continued to argue (page 10) that the specification provides the support for the limitations "setting said status entry for each of said tiles in said tile format table, wherein said status entry indicates the memory size of each of said tiles after compression, with a full size indicating a non-compressed tile;" and "retrieving said tiles from said memory whereby said status entry indicating memory size is used to determine whether said tiles need to be decompressed at time of retrieval." As indicated in the previous Office Action, the cited locations by the Applicant only shows the status entry of data ("words" and NOT THE STATUS ENTRY OF MEMORY SIZE. The Applicant further argues (top of page 15) that it is clear that the status entry does indicate the memory size by a measure of a number of words because it is well known to measure a memory size by the number of data words. The Applicant further gives an analysis by indicating that if the specification shows the temperature is measured in Celsius then it would be well known to measure in Fahrenheit scale. The Examiner respectfully disagrees. First, one skilled in the art measures the number of words DOES NOT NECESSARILY teaches the concept of measuring memory size. To measure number of words, one skilled in the art could implement a counter to keep track the number of words by its iteration process. Now, this has nothing to do with memory size. Secondly if the original specification teaches the measurement of temperature in Celsius and never discloses the

measure of Fahrenheit, the Examiner will not consider the claim if the Applicant claim the measurement of temperature in Fahrenheit since the Applicant NEVER disclose it in the specification. Perhaps, one skilled in the art know a technique/method/algorithm is known but one WILL NOT know that "why/who/when/where/what" and "how" a well know method is implement into a novelty of the applicant if it never disclosed in the original specification. Also according to MPEP 608.01 37 CFR 1.71. Detailed description and specification of the invention clearly indicates that "(a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in **such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains,** or with which it is most nearly connected, to make and use the same." Thus, it is the Applicant's duties to make sure the original disclosure discloses all the elements of the limitation. Similarly, the Applicant need to show the support for the limitation "retrieving said tiles from said memory whereby said status entry indicating memory size is used to determine whether said tiles need to be decompressed at time of retrieval."

3. Applicant's arguments with regard to the rejection of claims 14 and 15 under 35 U.S.C. 112, 1st paragraph. The Applicant argues have been fully considered and persuasive, the rejection is withdrawn.

4. Applicant's arguments with regard to the rejection of claims 1-8 and 14-15 under 35 U.S.C. 103. The Applicant argues have been fully considered, but are not considered persuasive because of the following reasons:

Regarding claim 1, the Applicant shows the support for "defining a tile format table, separate from data storage of said tiles, containing a status entry for each of said plurality of tiles" on page 8, lines 2-14 of the specification. The Examiner once again disagrees. The Applicant continuously to implicit that the teaching is the original discourse but in fact it is nowhere to be found. Again, the specification must show a full, clear, concise and exact term to enable any person skill in the art to understand. It IS NOT THE EXAMINER'S JOB to try to understand something that was never disclosed in the original specification. In addition, this language becomes confusing. One skilled in the art does not quite sure whether a tile format table is stores separately to a different storage or it is store separate from tiles and how is store separately from the tiles. Therefore, the Examiner will make a broad interpretation in light with the specification as one skilled in the art as best understood.

Thus, the rejections of all of the claims are maintained.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-11 and 13-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification does not show the "setting said status entry for each of said tiles in said tile format table, wherein said status entry **indicates the memory size of each of**

said tiles after compression, with a full size indicating a non-compressed tile." (Emphasis added). Also with regard to limitation (b) (page 5 of the remarks), the support indicated by the Applicant page 9, line 19 - page 10, line 2 and page 8, line 11-15 merely shows the status entry of data ("words") and not the status entry of memory size. Thus the rejection of this limitation will be maintained. Also regarding to the newly added limitation (f), the indicated support (FIG. 2 and FIG. 3, page 9, lines 5-15, page 10, lines 4-6, 15-21) of the Applicant again does not show the disclosure for this limitation. First, there is no support of status entry indication memory size. The disclosure merely discloses the status entry indication for data information. In addition, there is no support for the usage of status entry indicating memory size to determine whether said tiles need to be decompressed at time of retrieval.

Claims not specifically addressed depend from indefinite antecedent claims.

Claim Objections

7. Claims 1, 5 and 9 are objected to because these claim's language (limitation (f) "retrieving said tiles ... of retrieval" as disclosed page 5 of the remarks) does not reflect the support indicated by the Applicant (FIG. 2 and FIG. 3, page 9, lines 5-15; page 10, lines 4-6, 15-21). Appropriate correction is required. The prior art rejection based on the Examiner's best understanding.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 1-8, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Bhargava U.S. Patent No. 5,471,248 and Jung U.S. Patent No. 5,805,226.

Regarding claim 1, Bhargava teaches a method of compressing data in a graphics processing system (column 2, lines 15-23) comprising:

Defining a plurality of tiles of data (column 2, lines 32-36);

Defining a tile format table (FIG. 13 A), separate from data storage of said tiles, containing a status entry (header information) for each for each of said plurality of tiles (column 10, lines 10-17);

Setting said status entry for each of said tiles in said tile format table (column 13, lines 30-45), wherein said status entry indicates the memory size (the compressed information and image change information) of each of said tiles after compression, with a full size indicating a non-compress tiles (column 2, lines 50-53 and column 6, lines 53-67);

Storing said compressed tile in a memory (column 4, lines 20-22 and column 16, lines 22-25, 30-37).

Retrieving said tiles from said memory whereby said status entry indicating memory size is used to determine whether said tiles need to be decompressed at time of retrieval (buffer receiver and hold code representation of tiles by a comparison process) (column 12, lines 49-67).

Bhargava does not teach the concept of determine the selection of the compressed tile if the compressed tile is smaller than the uncompressed tile. Jung discloses a method of encoding (compress) blocks of video signal included frames that divided into blocks (tile) (Abstract, first 4 lines) and determining (FIG. 2, element 400) whether to select (FIG. 2, 500) the compressed tile

(FIG. 2, element 300) over the uncompressed tile if the compressed tile is smaller than the uncompressed tile (column 4, lines 62-67 and column 5, lines 1-2). Modifying Bhargava's method of compressing data in a graphics processing system according to Jung would able to choose the smaller data size between the compressed and uncompressed tile to reduce the information contained in the video signal and thus free the bandwidth (column 5, lines 17-22). This would improve processing and therefore, it would have been obvious to one of the ordinary skill in the art to modify Bhargava according to Jung.

For claim 2, Bhargava teaches a method wherein said compression is lossless (Huffman) (column 13, line 14 and FIG. 12, element 120).

Referring to claim 3, Bhargava discloses the method wherein each of said tiles comprises a cache line (A computer inherently has a cache line) (column 8, lines 50-55).

Regarding claim 4, Bhargava teaches the method wherein tiles read from said memory are decompressed (FIG. 6 and column 8, lines 62-67) when said status entry (header information bit) indicates that said tile is a compressed tile (FIG. 13 A).

Regarding claim 5, please refer back to claim 1 for the explanation.

For claim 6, Bhargava teaches the method wherein each compressed tile is compressed using one of a plurality of compression methods (Huffman) (column 13, line 14 and FIG. 12, element 120).

Regarding claim 7, Bhargava teaches the method wherein each compressed tile includes a value identifying the compression of said plurality of compression methods used to compress said compressed tile (FIG. 13 A and column 7, lines 50-60).

For claim 8, Bhargava teaches the method wherein each tile is comprised of pixels having pixel color components (RGB pixels) (column8, lines 15-16 and column 12, lines 10-15).

For claims 14, Bhargava further teaches the method wherein said a status entry further indicates the validity of data (data calculation) in said tile (column 7, lines 44-47).

Allowable Subject Matter

10. Claim 9 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

11. Claims 10-11, 13 and 15 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

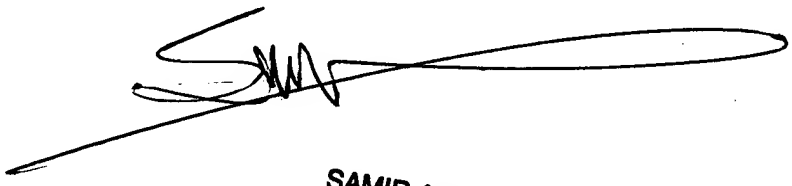
Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 571-272-7424. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 571-272-7414. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

BL
July 5, 2005



SAMIR AHMED
PRIMARY EXAMINER